

*Pedicularis groenlandica*

Elephanthead Pedicularis

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Learning about plants can often be a lesson in history, but history isn't always as clear as we might wish. It is believed that Meriwether Lewis made the first collection of elephanthead pedicularis on July 6, 1806. Frederick Pursh, an immanent botanist of the day, attached the label to the specimen sheet, which can be found today in the Lewis & Clark Herbarium in Philadelphia. Pursh's label says the plants were collected on July 6, 1806 "on the low plains on the heath [shrubland] of Clarks R." However, there are actually two different species on the specimen sheet, one is elephanthead pedicularis (*Pedicularis groenlandica*) and the other is fern-leaf lousewort (*Pedicularis cystopteridifolia*). James Reveal and other prominent present-day botanists who have examined the Lewis and Clark plant collection, question whether or not the label applies to elephanthead pedicularis and raise the possibility that it may apply only to fern-leaf lousewort, also on the specimen sheet. We will probably never know for sure, so we in Montana will continue to claim elephanthead pedicularis as a Montana Lewis and Clark plant. There is a second sheet in the Lewis & Clark Herbarium that contains elephanthead pedicularis. The label Pursh applied to that sheet says, "On the low plains on the heath of Clarks R. Jul. 6th 1806 P. uncinata Willd. [two vertical parallel lines] P. elata Willd." This label is the same as the label applied to the sheet containing both elephanthead pedicularis and fern-leaf lousewort and some scholars believe the label belongs only with the sheet containing the mixed specimens. In his book, *Flora Americae Septentrionalis*, Pursh gives the location for this collection as "the low plains of the Columbia" and cites a Lewis specimen as the source of his information. All very confusing to us 200 years after the plants were collected!

On July 6, 1806 Lewis and his small party were along the Blackfoot River in Powell County. On that day, the explorers left their camp near the vicinity of Seaman's [Monture] Creek just west of present-day Ovando and traveled along the Cokahlarishkit [Blackfoot] River valley before camping near what is now Lincoln, Montana. As pointed out by Wayne Phillips in *Plants of the Lewis & Clark Expedition*, Lewis often collected plants with similar features for later comparison. On July 6th, elephanthead pedicularis and fern-leaf lousewort were collected along with Bessey's crazyweed – all of which have purplish flowers in a congested raceme and pinnately divided leaves.

On the day these plants were collected tensions were high because the Nez Perce guides had warned Lewis and his men that they faced danger from enemy tribes along their route. On July 6<sup>th</sup>, Lewis wrote in his journal, "the trail which we take to be a returning war-party of the Minnetares of Fort de prairie [Atsinas of Saskatchewan, allies of the Blackfoot] becomes much fresher...these plains continue their course S 75 E. and are wide where the river leaves them. up this valley and creek a road passes to Dearbourn's river and thence to the Missouri...we expect to meet with the Minnetares and are therefore much on our guard both day and night."

Today we know more about what Lewis was only beginning to discover. Elephanthead pedicularis is found in wet meadows and along cold streams of mid- to high elevations in the mountains. Botanists classify this plant as *Pedicularis groenlandica*, and it has traditionally been placed in the figwort family (Scrophulariaceae), although that may change. Presumably, *groenlandica* refers to Greenland, and the species is known to occur there. It also occurs as far east as Newfoundland, Canada, south to New Mexico and west to California. The plant is considered rare in Yukon and Saskatchewan.

Its common name is very fitting because the pink-to-purple flowers look like little elephant heads spiraling around the stem. Petal lobes of the lower lip form the droopy ears while the petal's upper lip is long and curved upwards to form the trunk. The plants typically have clusters of several stems and can reach a height of two feet. These features make this native perennial hard to confuse with any other flowering plant. Besides being cute, the elephant-shape of the flower helps facilitate pollination while also reducing the chance of hybridization. The scientific name, *Pedicularis*, pertains to lice. Commonly members of the genus are referred to as louseworts because of the old superstition that if livestock ate these plants they would suffer from an infestation of lice.

Cheyenne Indians used elephanthead pedicularis leaves as an infusion to relieve coughs and other species in the genus have been used for food and medicine in various ways. Herbal practitioners today may use various species of *Pedicularis* as a sedative and mild skeletal relaxant. Elk graze elephanthead pedicularis in early summer.

The Blackfoot Valley is still a great place to find elephanthead pedicularis today. Elephanthead can also be found in meadows along Alice Creek below Lewis & Clark Pass. The wet meadow habitat that supports elephanthead pedicularis is a fragile and unique system that is easily disturbed. Special care should be taken as you enjoy an outing to observe Montana's Lewis and Clark plants that are not only beautiful, but have a unique place in history.